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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,118	06/09/2005	Mototsugu Takamura	450100-04503	4810

7590 05/14/2008
William S Frommer
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EXAMINER

ALPHONSE, FRITZ

ART UNIT	PAPER NUMBER
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2112

MAIL DATE	DELIVERY MODE
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05/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/510,118	Applicant(s) TAKAMURA, MOTOTSUGU	
	Examiner Fritz Alphonse	Art Unit 2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) 23-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>22</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election without traverse of Group I in the reply filed on 2/20/2008 is acknowledged.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The Information Disclosure Statement (IDS) submitted on 10/04/2004 has been considered by the examiner.

Specification

4. The abstract of the disclosure is objected to because the numbers 10, 12, 13, 24, 25 should not be included in the abstract. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Sako (U.S. Pat. No. 5,732,088).

As to claim 1, Sako (fig. 1) shows an interleaving device comprising: a first interleaving means (3a) for performing folding interleaving on first data comprised of plural input packets, in units of a data word or plural consecutive data words (col. 6, lines 32-48); and a second

interleaving means (3b) for performing interleaving on second data comprised of plural packets generated by said first interleaving means, in units of the packet (col. 9, lines 15-45).

As to claims 2-3, Sako discloses an interleaving device, wherein said second interleaving means (interleaver 2b) replaces a value of beginning data in a first packet of packet-unit interleave (col. 7, lines 25-40); and wherein said beginning data is a sink byte in a header of a packet that constitutes said first data (fig. 12, col. 12, lines 7-19).

As to claims 4-5, Sako discloses an interleaving device, wherein said first interleaving means (3a) is installed by using first storage means incorporated in a programmable device; and wherein said second interleaving means (3b) is installed by using second storage means externally attached to said programmable device (col. 5, lines 10-20). Furthermore, Sako (fig. 10) discloses a dual-port random access memory (RAM 21) in which inconsecutive addresses are accessed in units of a data word at each clock synchronized with the data word.

As to claims 6-7, Sako discloses an interleaving device, wherein said second storage means is a random access memory fitted to burst transfer of data in units of plural data words (fig. 4; col. 11, lines 39-45); and wherein said second storage means is a synchronous dynamic random access memory (col. 7, lines 57 through col. 8 line 9).

As to claims 8-9 Sako discloses an interleaving device wherein an error correction code is added to each of the packets that constitute said first data (col. 3, lines 31-41); and wherein each of the packets that constitute said first data is obtained by adding said error correction code to plural transport packets, respectively, that constitute a transport stream obtained by performing compression and encoding on the basis of the MPEG-2 standard on predetermined data (col. 1, lines 23-39).

As to claims 10-11, Sako discloses an interleaving device, wherein said error correction code is a Reed-Solomon code; and wherein said first interleaving means performs folding interleaving on said first data in units of a byte or plural consecutive bytes (col. 5, lines 10-20).

As to claim 12, Sako discloses an interleaving method including a first interleaving step of performing folding interleaving on first data comprised of plural input packets, in units of a data word or plural consecutive data words (col. 6, lines 32-48); and a second interleaving step of performing interleaving, in units of a packet, on second data comprised of plural packets generated by the first interleaving step (col. 9, lines 15-45).

As to claims 13-14, Sako interleaving method, wherein in said second interleaving step (note second interleaver 2b), a value of beginning data in a first packet of packet-unit interleave is replaced (col. 7, lines 25-40), and wherein said beginning data is a sink byte in a header of a packet that constitutes said first data (fig. 12, col. 12, lines 7-19).

As to claim 15-16, Sako discloses and interleaving method, wherein said first interleaving step (note first interleaver 2a) is performed by using first storage means which is incorporated in a programmable device; and wherein said second interleaving step (2b) is performed by using second storage means which is externally attached to the programmable device (col. 5, lines 10-20). Furthermore, Sako (fig. 10) discloses a dual-port random access memory (RAM 21) in which inconsecutive addresses are accessed in units of a data word at each clock synchronized with the data word is used.

As to claims 17-18, method claims 17-18 correspond to apparatus claims 6-7; therefore, they are analyzed as previously discussed in claims 6-7 above.

As to claims 19-20, Sako discloses an interleaving method, wherein an error correction code is added to each of the packets that constitute said first data (col. 3, lines 31-41) and wherein each of the packets that constitute said first data is obtained by adding said error correction code to each of plural transport packets that constitute a transport stream obtained by performing compression and encoding on the basis of the MPEG-2 standard on predetermined data (col. 1, lines 23-39).

As to claims 21-22, method claims 21-22 correspond to apparatus claims 10-11; therefore, they are analyzed as previously discussed in claims 10-11 above.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington, D.C. 20231

or faxed to: (703) 872-9306 for all formal communications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fritz Alphonse, whose telephone number is (571) 272-3813. The examiner can normally be reached on M-F, 8:30-6:00, Alt. Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques, can be reached at (571) 272-6962.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-3824

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Information regarding the status of an application may also be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Fritz Alphonse/

Art Unit 2112

May 8, 2008

/JACQUES H LOUIS-JACQUES/

Supervisory Patent Examiner, Art Unit 2112

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